

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 101 049,586A
Source: IFW16
Date Processed by STIC: 4-4-05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 04/04/2005

PATENT APPLICATION: US/10/049,586A

TIME: 14:47:52

Input Set : A:\140140349U2.AMENDSEQ.TXT

Output Set: N:\CRF4\04012005\J049586A.raw

4 <110> APPLICANT: Blackshear, Perry J.
 5 Carballo-Jane, Ester
 6 Lai, Wi S.
 9 <120> TITLE OF INVENTION: TTP-RELATED ZINC FINGER DOMAINS AND
 10 METHODS OF USE
 12 <130> FILE REFERENCE: 14014.0349U2
 14 <140> CURRENT APPLICATION NUMBER: 10/049,586A
 15 <141> CURRENT FILING DATE: 2002-02-12
 17 <150> PRIOR APPLICATION NUMBER: PCT/US00/22199
 18 <151> PRIOR FILING DATE: 2000-08-14
 20 <150> PRIOR APPLICATION NUMBER: 60/148,810
 21 <151> PRIOR FILING DATE: 1999-08-13
 23 <160> NUMBER OF SEQ ID NOS: 48
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 326
 29 <212> TYPE: PRT
 30 <213> ORGANISM: Homo sapiens
 32 <400> SEQUENCE: 1
 33 Met Asp Leu Thr Ala Ile Tyr Glu Ser Leu Leu Ser Leu Ser Pro Asp
 34 1 5 10 15
 35 Val Pro Val Pro Ser Asp His Gly Gly Thr Glu Ser Ser Pro Gly Trp
 36 20 25 30
 37 Gly Ser Ser Gly Pro Trp Ser Leu Ser Pro Ser Asp Ser Ser Pro Ser
 38 35 40 45
 39 Gly Val Thr Ser Arg Leu Pro Gly Arg Ser Thr Ser Leu Val Glu Gly
 40 50 55 60
 41 Arg Ser Cys Gly Trp Val Pro Pro Pro Gly Phe Ala Pro Leu Ala
 42 65 70 75 80
 43 Pro Arg Leu Gly Pro Glu Leu Ser Pro Ser Pro Thr Ser Pro Thr Ala
 44 85 90 95
 45 Thr Ser Thr Thr Pro Ser Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 46 100 105 110
 47 Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln Phe Ala His
 48 115 120 125
 49 Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys Tyr Lys Thr
 50 130 135 140
 51 Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser
 52 145 150 155 160
 53 Arg Cys His Phe Ile His Asn Pro Ser Glu Asp Leu Ala Ala Pro Gly
 54 165 170 175
 55 His Pro Pro Val Leu Arg Gln Ser Ile Ser Phe Ser Gly Leu Pro Ser
 56 180 185 190

(pg. 6)

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57 Gly Arg Arg Thr Ser Pro Pro Pro Gly Leu Ala Gly Pro Ser Leu
58      195      200      205
59 Ser Ser Ser Ser Phe Ser Pro Ser Ser Ser Pro Pro Pro Gly Asp
60      210      215      220
61 Leu Pro Leu Ser Pro Ser Ala Phe Ser Ala Ala Pro Gly Thr Pro Leu
62 225      230      235      240
63 Ala Arg Arg Asp Pro Thr Pro Val Cys Cys Pro Ser Cys Arg Arg Ala
64      245      250      255
65 Thr Pro Ile Ser Val Trp Gly Pro Leu Gly Gly Leu Val Arg Thr Pro
66      260      265      270
67 Ser Val Gln Ser Leu Gly Ser Asp Pro Asp Glu Tyr Ala Ser Ser Gly
68      275      280      285
69 Ser Ser Leu Gly Gly Ser Asp Ser Pro Val Phe Glu Ala Gly Val Phe
70      290      295      300
71 Ala Pro Pro Gln Pro Val Ala Ala Pro Arg Arg Leu Pro Ile Phe Asn
72 305      310      315      320
73 Arg Ile Ser Val Ser Glu
74      325
76 <210> SEQ ID NO: 2
77 <211> LENGTH: 338
78 <212> TYPE: PRT
79 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 2
82 Met Thr Thr Thr Leu Val Ser Ala Thr Ile Phe Asp Leu Ser Glu Val
83 1      5      10      15
84 Leu Cys Lys Gly Asn Lys Met Leu Asn Tyr Ser Ala Pro Ser Ala Gly
85      20      25      30
86 Gly Cys Leu Leu Asp Arg Lys Ala Val Gly Thr Pro Ala Gly Gly Gly
87      35      40      45
88 Phe Pro Arg Arg His Ser Val Thr Leu Pro Ser Ser Lys Phe Arg Gln
89      50      55      60
90 Asn Gln Leu Leu Ser Ser Leu Lys Gly Glu Pro Ala Pro Ala Leu Ser
91 65      70      75      80
92 Ser Arg Asp Ser Arg Phe Arg Asp Arg Ser Phe Ser Glu Gly Gly Glu
93      85      90      95
94 Arg Leu Leu Pro Thr Gln Lys Gln Pro Gly Gly Gly Gln Val Asn Ser
95      100      105      110
96 Ser Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala
97      115      120      125
98 Cys Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu
99      130      135      140
100 Arg Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr
101 145      150      155      160
102 Phe His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile
103      165      170      175
104 His Asn Ala Glu Glu Arg Arg Ala Leu Ala Gly Ala Arg Asp Leu Ser
105      180      185      190
106 Ala Asp Arg Pro Arg Leu Gln His Ser Phe Ser Phe Ala Gly Phe Pro
107      195      200      205

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108 Ser Ala Ala Ala Thr Ala Ala Ala Thr Gly Leu Leu Asp Ser Pro Thr
109      210                      215                      220
110 Ser Ile Thr Pro Pro Pro Ile Leu Ser Ala Asp Asp Leu Leu Gly Ser
111 225                      230                      235                      240
112 Pro Thr Leu Pro Asp Gly Thr Asn Asn Pro Phe Ala Phe Ser Ser Gln
113                      245                      250                      255
114 Glu Leu Ala Ser Leu Phe Ala Pro Ser Met Gly Leu Pro Gly Gly Gly
115                      260                      265                      270
116 Ser Pro Thr Thr Phe Leu Phe Arg Pro Met Ser Glu Ser Pro His Met
117                      275                      280                      285
118 Phe Asp Ser Pro Pro Ser Pro Gln Asp Ser Leu Ser Asp Gln Glu Gly
119 290                      295                      300
120 Tyr Leu Ser Ser Ser Ser Ser Ser His Ser Gly Ser Asp Ser Pro Thr
121 305                      310                      315                      320
122 Leu Asp Asn Ser Arg Arg Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser
123                      325                      330                      335
124 Asp Asp
127 <210> SEQ ID NO: 3
128 <211> LENGTH: 492
129 <212> TYPE: PRT
130 <213> ORGANISM: Homo sapiens
132 <400> SEQUENCE: 3
133 Met Ser Thr Thr Leu Leu Ser Ala Phe Tyr Asp Val Asp Phe Leu Cys
134 1                      5                      10                      15
135 Lys Thr Glu Lys Ser Leu Ala Asn Leu Asn Leu Asn Asn Met Leu Asp
136                      20                      25                      30
137 Lys Lys Ala Val Gly Thr Pro Val Ala Ala Ala Pro Ser Gly Phe
138                      35                      40                      45
139 Ala Pro Gly Phe Leu Arg Arg His Ser Ala Ser Asn Leu His Ala Leu
140 50                      55                      60
141 Ala His Pro Ala Pro Ser Pro Gly Ser Cys Ser Pro Lys Phe Pro Gly
142 65                      70                      75                      80
143 Ala Ala Asn Gly Ser Ser Cys Gly Ser Ala Ala Ala Gly Gly Pro Thr
144                      85                      90                      95
145 Ser Tyr Gly Thr Leu Lys Glu Pro Ser Gly Gly Gly Gly Thr Ala Leu
146                      100                     105                     110
147 Leu Asn Lys Glu Asn Lys Phe Arg Asp Arg Ser Phe Ser Glu Asn Gly
148                      115                     120                     125
149 Asp Arg Ser Gln His Leu Leu His Leu Gln Gln Gln Gln Lys Gly Gly
150 130                     135                     140
151 Gly Gly Ser Gln Ile Asn Ser Thr Arg Tyr Lys Thr Glu Leu Cys Arg
152 145                     150                     155                     160
153 Pro Phe Glu Glu Ser Gly Thr Cys Lys Tyr Gly Glu Lys Cys Gln Phe
154                      165                      170                      175
155 Ala His Gly Phe His Glu Leu Arg Ser Leu Thr Arg His Pro Lys Tyr
156                      180                      185                      190
157 Lys Thr Glu Leu Cys Arg Thr Phe His Thr Ile Gly Phe Cys Pro Tyr
158                      195                      200                      205
159 Gly Pro Arg Cys His Phe Ile His Asn Ala Asp Glu Arg Arg Pro Ala

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Input Set : A:\140140349U2.AMENDSEQ.TXT

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```

160      210      215      220
161 Pro Ser Gly Gly Ala Ser Gly Asp Leu Arg Ala Phe Gly Thr Arg Asp
162 225      230      235      240
163 Ala Leu His Leu Gly Phe Pro Arg Glu Pro Arg Pro Lys Leu His His
164      245      250      255
165 Ser Leu Ser Phe Ser Gly Phe Pro Ser Gly His His Gln Pro Pro Gly
166      260      265      270
167 Gly Leu Glu Ser Pro Leu Leu Leu Asp Ser Pro Thr Ser Arg Thr Pro
168      275      280      285
169 Pro Pro Pro Ser Cys Ser Ser Ala Ser Ser Cys Ser Ser Ser Ala Ser
170      290      295      300
171 Ser Cys Ser Ser Ala Ser Ala Ala Ser Thr Pro Ser Gly Thr Pro Thr
172 305      310      315      320
173 Cys Cys Ala Ser Ala Ala Ala Leu Arg Leu Leu Tyr Gly Thr Gly
174      325      330      335
175 Gly Ala Glu Asp Leu Leu Ala Pro Gly Ala Pro Cys Ala Ala Cys Ser
176      340      345      350
177 Ser Ala Ser Cys Ala Asn Asn Ala Phe Ala Phe Gly Pro Glu Leu Ser
178      355      360      365
179 Ser Leu Ile Thr Pro Leu Ala Ile Gln Thr His Asn Phe Ala Ala Val
180      370      375      380
181 Ala Ala Ala Ala Tyr Tyr Arg Ser Gln Gln Gln Gln Gln Gln Gly
182 385      390      395      400
183 Leu Ala Pro Pro Ala Gln Pro Pro Ala Pro Pro Ser Ala Thr Leu Pro
184      405      410      415
185 Ala Gly Ala Ala Ala Pro Pro Ser Pro Pro Phe Ser Phe Gln Leu Pro
186      420      425      430
187 Arg Arg Leu Ser Asp Ser Pro Val Phe Asp Ala Pro Pro Ser Pro Pro
188      435      440      445
189 Asp Ser Leu Ser Asp Arg Asp Ser Tyr Leu Ser Gly Ser Leu Ser Ser
190      450      455      460
191 Gly Ser Leu Ser Gly Ser Glu Ser Pro Ser Leu Asp Pro Gly Arg Arg
192 465      470      475      480
193 Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser Asp Asp
194      485      490
196 <210> SEQ ID NO: 4
197 <211> LENGTH: 276
198 <212> TYPE: PRT
199 <213> ORGANISM: Xenopus laevis
201 <400> SEQUENCE: 4
202 Met Glu Ile Ser Asn Asp Ser Leu Asp Leu Phe Ser Ser Phe Phe Pro
203 1      5      10      15
204 Gln Leu Ser Pro Pro Ala Asp Pro Glu Thr Pro Leu Leu Pro Ser Phe
205      20      25      30
206 Ser Ala Pro Pro Lys His Leu Ser Ser Ser Leu Arg Tyr Lys Thr
207      35      40      45
208 Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys Ala Tyr Arg Asn
209      50      55      60
210 Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg Pro Pro Val Gln

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Input Set : A:\140140349U2.AMENDSEQ.TXT

Output Set: N:\CRF4\04012005\J049586A.raw

```

211 65              70              75              80
212 His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe His Val Leu Gly
213              85              90              95
214 Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His Ser Pro Gln Glu
215              100              105              110
216 Arg Arg Glu Pro Pro Val Leu Pro Asp Asn Leu Ser Leu Pro Pro Arg
217              115              120              125
218 Arg Tyr Gly Gly Pro Tyr Arg Glu Arg Cys Arg Leu Trp Ser Ala Pro
219              130              135              140
220 Gly Gly Cys Pro Tyr Gly Ala Arg Cys His Phe Gln His Pro Lys Ser
221 145              150              155              160
222 Ala Arg Glu Thr Cys Arg His Phe Ala Ala Leu Gly Asp Cys Pro Tyr
223              165              170              175
224 Gly Ala Cys Cys His Phe Ser His Ser Pro Pro Leu Asp Arg Trp Gly
225              180              185              190
226 Ser Gly Thr Lys Asn Ser Ser Gly Ser Leu Ser Pro Ser Asp Pro Asp
227              195              200              205
228 Ser Asp Pro Asp Thr Pro Val Leu Ser Glu Ser Pro Ala Asn Asn Ala
229              210              215              220
230 Phe Ser Phe Ser Ser Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Ile
231 225              230              235              240
232 Leu Gly Asp Asp Asp Leu Pro Thr Ala Ser Asp Pro Leu Pro Gly Asp
233              245              250              255
234 Asp Thr Asp Leu Leu Pro Gly Asp Glu Glu Ile Ala Gln Gly Leu Leu
235              260              265              270
236 Ser Val Leu Gly
237              275
239 <210> SEQ ID NO: 5
240 <211> LENGTH: 327
241 <212> TYPE: PRT
242 <213> ORGANISM: Cyprinas carpio
244 <400> SEQUENCE: 5
245 Met Phe Glu Thr Ser Thr Asp Asn Leu Phe Leu Phe Pro Thr Glu Gly
246 1              5              10              15
247 Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Ala Ser Gly Ser Leu
248              20              25              30
249 Ser Leu Ala Lys Ala Leu Leu Pro Leu Val Glu Ser Pro Ser Pro Pro
250              35              40              45
251 Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu Cys Ser
252              50              55              60
253 Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys Gln Phe
254 65              70              75              80
255 Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro Lys Tyr
256              85              90              95
257 Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys Val Tyr
258              100              105              110
259 Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg Pro Val
260              115              120              125
261 Arg Gln Arg Cys Arg Asn Val Pro Cys Arg Thr Phe Arg Ala Phe Gly

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/04/2005
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Input Set : A:\140140349U2.AMENDSEQ.TXT
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:27; Xaa Pos. 1
Seq#:46; Xaa Pos. 2,3,4,5,6,7,8,9,11,13,16,17,19,21
Seq#:47; Xaa Pos. 2,3,4,5,6,7,8,9,11,12,13,14,15,17,18,19

VERIFICATION SUMMARY

DATE: 04/04/2005

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TIME: 14:47:53

Input Set : A:\140140349U2.AMENDSEQ.TXT

Output Set: N:\CRF4\04012005\J049586A.raw

L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0

L:807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0

M:341 Repeated in SeqNo=46

L:827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0

M:341 Repeated in SeqNo=47